

# **HHS Public Access**

Author manuscript

Afr J Midwifery Womens Health. Author manuscript; available in PMC 2016 April 08.

Published in final edited form as:

Afr J Midwifery Womens Health. 2014; 8(sup2): 4-5.

# The African Health Profession Regulatory Collaborative (ARC) at two years

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#### **Abstract**

**Background**—The African Health Profession Regulatory Collaborative (ARC) for nurses and midwives was created in response to the increasing reliance on shifting HIV tasks to nurses and midwives without the necessary regulation supporting this enhanced professional role. ARC

**Approach**—The ARC initiative comprises regional meetings, technical assistance, and regulatory improvement grants which enhance HIV service delivery by nurses and midwives, and systematic evaluation of project impact.

**Results**—Eight of 11 countries funded by ARC advanced a full stage in regulatory capacity during their 1-year project period. Countries in ARC also demonstrated increased capacity in project management and proposal writing.

**Discussion**—The progress of country teams thus far suggests ARC is a successful model for regulation strengthening and capacity building, as well as presenting a novel approach for sustainability and country ownership. The ARC platform has been a successful vehicle for regional harmonisation of updated regulations and promises to help facilitate the enhancement of HIV service delivery by nurses and midwives.

The African Health Profession Regulatory Collaborative (ARC) for nurses and midwives was created in 2010 in response to the increased reliance on shifting HIV service delivery tasks from physicians to nurses and midwives. HIV task sharing (previously referred to as task shifting) was endorsed by the World Health Organization (WHO) in 2008 (WHO/ President's Emergency Plan for AIDS Relief (PEPFAR)/ Joint United Nations Programme

on HIV/AIDS (UNAIDS), 2008). However, in many countries in sub-Saharan Africa, the recommended changes to professional regulation for nurses and midwives to safely take on this expanded role were lacking (Samb et al, 2007; Lehmann et al, 2009; Zuber et al, 2014). Regulations, such as scopes of practice, licensure examinations, and pre-service education accreditation often did not encompass the critical HIV services that nurses and midwives were widely providing in the practice setting (Miles et al, 2006; USAID, 2010; WHO, 2011). Health profession regulatory boards or councils are responsible for regulating the standards for professional practice and education, yet their role in advancing task sharing for HIV scale-up was largely overlooked (PEPFAR, 2009). The idea behind ARC was to engage countries where nurses and midwives provide advanced HIV services and to support the professional councils so that regulatory changes necessary for ensuring the safety and sustainability of HIV task sharing take hold. Because regulatory advancement requires collaboration among national stakeholders including the ministry of health, professional associations, and health educators, ARC was designed to also engage these key stakeholders from each participating country.

# **Objectives**

The objectives of ARC are to enable national nursing and midwifery leadership teams in the east, central, and southern African (ECSA) region to:

- Sustain the scale-up of HIV services through strengthened nursing and midwifery regulatory frameworks
- Align accreditation, licensing, continuing education, scopes of practice among other key regulatory functions with global guidelines and regional standards
- Review legislation and regulation to strengthen the alignment of policy and practice for nurses and midwives
- Strengthen the capacity and collaboration of national organisations to perform key regulatory functions and mobilise resources
- Foster a sustained regional network of nursing and midwifery regulatory leaders to facilitate the exchange of best practices.

ARC was constructed as a partnership between five groups with distinct but synergistic experiences and interests in supporting nursing and midwifery in sub-Saharan Africa: the US Centers for Disease Control and Prevention (CDC) through the President's Emergency Plan for AIDS Relief (PEPFAR), the Lillian Carter Center for Global Health and Social Responsibility at Emory University, the Commonwealth Nurses Federation (CNF), the Commonwealth Secretariat, and the East, Central and Southern Africa Health Community (ECSA-HC). Collectively called the ARC 'faculty', staff from these groups coordinate the implementation of ARC as well as provide technical assistance to individual countries with ARC projects.

# **Conceptual framework**

The structure of ARC is adapted from the Institute for Healthcare Improvement's (IHI) clinical collaborative model for breakthrough organisational change (IHI, 2003). The IHI model is organised so that interested groups can learn from each other and from recognised experts in selected topic areas. Quality improvement projects are designed with peer and expert input; projects are implemented during 'Action Periods' and presented back to peers and experts for feedback during 'Learning Sessions'. The collaborative cycle culminates with an annual 'Summative Congress' during which each group presents their results and disseminates lessons learned. ARC adopted this model as it brings together national nursing and midwifery leadership teams, along with regional and international experts, to identify and discuss nursing and midwifery regulation issues impacting professional practice, particularly HIV service delivery. Country teams propose projects to address a national regulation priority, to which ARC provides funding for approved short-term grants. Country teams with funded proposals implement their respective projects during the Action Periods and present their progress and challenges at Learning Sessions, which are convened twice in a grant cycle (Figure 1). At the end of the 1-year cycle, supported teams present their projects and lessons learned to all ARC countries at the Summative Congress. The cycle then begins again.

Each country team involved in ARC includes nursing and midwifery leadership positions that are critical to advancing national regulations. The team from each country comprises 1) the chief nursing officer (CNO) from the ministry of health, representing health and service delivery policies; 2) the registrar from the regulatory council, representing professional standards and protection of the public; 3) the president of the professional association, representing the interests of the practicing nurses and midwives; and 4) a leader in nursing or midwifery academia, representing the pre-service education sector. During ARC's initial meeting in 2011, country teams—many of them who had never worked together previously—named themselves the 'Quad,' a term still used by the ARC community to refer to these national nursing stakeholders. Involvement of countries in ARC is contingent upon full participation of and collaboration among all members of the Quad.

# **Approach**

ARC is structured as a regional regulatory collaborative with three main components: regional meetings, regulatory improvement grants, and evaluation.

#### **Regional meetings**

ARC meetings (both Learning Sessions and Summative Congresses) are structured to facilitate the sharing of best practices and south-to-south collaboration. At each meeting, Quads present to each other, discuss lessons learned, and confer about how to address common challenges. The meeting agendas include time for Quad members to come together with their respective professional positions as CNOs, registrars, association presidents, and academicians to discuss challenges and identify priorities. Meetings also provide opportunities for Quads to network and strengthen professional relationships with their regional peers. ARC invites global and regional experts to attend meetings and provide

added insights on grant topic areas, present on quality improvement methodologies, and facilitate discussions on overarching themes, such as advocacy and leadership. Country teams at Learning Sessions also spend time developing project management skills.

### Regulatory improvement grants

Each year, ARC announces a call for project proposals and distributes proposal guidance and timelines. In addition to submitting the proposed project narrative and budget, country teams must also submit letters of support from each of their institutions and any organisations they plan to partner with during the project period. In Year 3, ARC's project solicitation called for proposals that explicitly linked regulation strengthening with enhanced nursing and midwifery HIV service delivery.

Once submitted to ARC, the proposals are reviewed by ARC faculty who serve as primary and secondary reviewers according to an objective criteria checklist. Reviewers score proposals according to evidence of country collaboration, project significance, feasibility, and a clearly delineated approach with specific measureable outcomes. The primary and secondary reviews of each country proposal are presented in a panel setting and discussed before each panelist submits their final score. The scores are ranked and the highest scoring proposals qualify for 1-year grant funding. Emory University then awards US\$10000 directly to the local organisation identified by the respective Quad team member, who serves as fiscal custodian. Each funded country is eligible for a technical assistance visit by a subject matter expert to assist with project implementation. Reports on project implementation and fiscal spending are required quarterly; final project and fiscal reports are submitted to and reviewed by ARC faculty at the end of the annual grant cycle.

#### **Evaluation**

A unique evaluation tool was designed to measure the impact and effectiveness of ARC projects aimed at strengthening national regulation. The ARC tool is a staged capability maturity model that includes seven key regulatory functions (registration, licensure, scope of practice, continuing professional development (CPD), accreditation of pre-service training programmes, professional conduct, and development or revision of legislation) and describes five stages of advancement of each function from an early stage to a highly sophisticated stage. The characteristics in a given stage are always foundational to the following stage, thus progression through the stages is linear and step-wise (Paulk et al, 1994). Each stage contains up to three characteristics of the regulatory function which must be in place to be considered in that stage. Advancement from one stage to the next represents a meaningful improvement in that regulatory function. ARC developed a tool, called the Regulatory Function Framework (RFF), in order to capture the various stages at which countries begin and end their projects and the incremental yet significant progress made. Each country receiving an ARC grant identifies their grant's regulatory function on the RFF and, according to the descriptions of the characteristics for each stage, selects the stage that describes where they are beginning their project. At the end of each project cycle, country teams use the RFF to indicate their progress in implementing their project (Figure 2). The use of various objective criteria within each stage is intended to reduce the positive bias which may result from self-reporting.

# Results

ARC meetings have grown steadily since the first Summative Congress involving 13 countries to the third Summative Congress which recently convened 18 countries. The number of affiliate groups working with ARC has grown as well, from the core group of organisations: WHO-AFRO, International Council of Nurses (ICN), the International Confederation of Midwives (ICM), to over 15 different official professional bodies that have participated in ARC. ARC meetings have been held in six cities in four different countries in the ECSA region (Figure 3). Holding the meetings in different locations provides opportunities for ARC participants to visit sites with highly relevant experience to learn from. The Year 2 Learning Session in Pretoria, South Africa facilitated a trip for ARC participants to the Democratic Nursing Organization of South Africa (DENOSA), the largest professional nursing association in Africa; the Learning Session in Gaborone included a site visit to the cutting-edge practicum labs at the University of Botswana Nursing School. The networking that took place at the Gaborone Learning Session also led to the re-establishment of the East Africa Nurses Association, which had been defunct for a number of years.

Since 2011, three cycles of proposal submission and grant awards have taken place (Figure 4). During this time, ARC countries submitted a total of 36 proposals on six major topic areas. Half of all proposals have been on the subject of CPD; scope of practice is the second most common proposal topic. Both the number of proposals submitted and the grants awarded have increased over the course of three proposal and grant cycles. The number of grants awarded increased due mainly to growth in PEPFAR and support from CDC offices in ARC countries. In addition, the average score of successful proposals increased over time from 79.5 (out of a maximum of 100) in Year 1 to an average of 82.3 in Year 3, reflecting an improvement in proposal quality and a growing competitiveness to win ARC funding.

Of the 11 countries that completed a full ARC project cycle, eight advanced at least one entire stage on the RFF (Figure 5). Of those eight countries, two countries advanced two stages over the course of the project period. The majority of ARC projects (seven) began at stage 1 of their prioritised regulatory function; all except one of those projects advanced to at least stage 2 of that function. Of the three countries that did not advance at least one stage, two began in fairly high stages (stages 3 and 4), from which advancement is more difficult. [While these projects fulfilled two of the criteria required for moving to the next stage, all three criteria have to be met in order to advance an entire stage.] The third country project advanced from stage 1 to 2 but unexpected political issues during the project period moved the activity back to stage 1. In addition, five ARC countries reportedly leveraged the success of their ARC grant to secure additional funding to carry on or expand their ARC projects (Agricole et al, 2014; Chilomo et al, 2014; Moetsana-Poka et al, 2014).

The ARC Year 3 projects explicitly link regulation strengthening with enhanced nursing and midwifery HIV service delivery (Table 1). Global and regional experts in prevention of mother-to-child transmission of HIV (PMTCT), paediatric HIV treatment, and nurse initiated and managed antiretroviral therapy (NIMART) will attend Learning Sessions to present and discuss relevant HIV and nursing developments, such as the 2013 consolidated guidelines for antiretroviral therapy (ART), which recommend that nurses and midwives

initiate and dispense ART (WHO, 2013). With the implementation of the Year 3 grants, ARC envisions regulatory frameworks which will facilitate improved access to and quality of HIV prevention and treatment services and primary health care overall.

ARC has created a number of resources benefitting the nursing and midwifery community. The most popular resource, the 'ARC Toolkit for Developing a National CPD Framework for Nurses and Midwives' provides a step-by-step guide to establishing each component of a national CPD framework (Iliffe and McCarthy, 2013). Examples of each component are excerpted directly from CPD frameworks of countries in the ECSA region, as well as from North America, Europe and Asia. Since its publication, Zambia used the ARC CPD toolkit to draft their national framework—moving them closer to stage 2 of CPD, before even receiving an ARC grant (Munsaka et al, 2013). Additionally, original nursing, midwifery, and human resources for health (HRH) research conducted through the ARC initiative has filled an important void in the global health literature on health professional regulation, stakeholder involvement, and NIMART in the content of HIV scale-up in the ECSA Region (McCarthy et al, 2013a; McCarthy et al, 2013b; Zuber et al, 2014). All country teams are members of the ARC Knowledge Gateway, an online community of practice forum. The Knowledge Gateway includes a discussion forum, a calendar of news and relevant upcoming events, and a regulatory resource center that houses over 60 reference documents, including national nurses and midwives acts from the region, CPD frameworks and scopes of practice from neighboring countries, HIV treatment guidelines, and ARC project management tools. Lastly, because of the focus on nursing and midwifery CPD in the region, ARC is working with the ECSA College of Nursing (ECSACON) to develop a virtual library of accredited modules and other content that could be accessed for CPD credit.

# **Discussion**

Countries engaged in ARC have made significant and measurable achievements to advance nursing leadership, policy, and regulation over the last 2 years. Eight of 11 ARC countries advanced one or more stages of capability over the course of their grant period. Measurable improvements in the areas of CPD, revised scopes of professional practice, and nursing legislation suggest that the innovative methodology employed by this south-to-south learning collaborative is a successful model for advancing health professional leadership, policy, and regulation. The ARC model could be explored and tested for its ability to promote similar nursing advancements in the West Africa region, where nursing policy and regulation is less defined, as well as with other health professions across sub-Saharan Africa, such as, clinical officers, physicians, and laboratorians, and in other regions of the world (Institute of Medicine, 2010).

A key component in the success of ARC has been the 'Quad' approach, which engages the four nursing sectors necessary to move any regulatory agenda forward. ARC cultivates strong working relationships among Quad members who are essential for professional advocacy and influence with key decision makers. The ARC Quads constitute a straightforward vehicle for planning and working together to advance specific nursing and midwifery issues in their country. Over the past 3 years, these teams have demonstrated a strong sense of ownership of their ARC projects, which can be attributed to the fact that they

collectively identified the nursing and midwifery issue to be addressed, agreed on a specific methodology to execute the activity, and are the parties responsible for implementing the desired changes.

The outcomes from the first 2 years of ARC also demonstrate the effectiveness of the regional approach in advancing nursing leadership, policy, and regulation. Through the regional meetings and Learning Sessions, and through the regional Knowledge Gateway, ARC country teams accelerated the progress of each country project, by offering lessons learned, constructive criticism, and recognised tools and methods. ARC countries established or strengthened seven CPD programmes, which share similar approaches in terms of framework, standards and implementation. The increasing number and quality of ARC proposals is impressive, given that at the first ARC meeting in 2011, ARC participants indicated by a show of hands that none had previously developed, written, or executed their own project proposal.

The ARC regional platform magnifies the impact of successful interventions and helps enhance consistency of regulations across the region. As an example, the guidance provided in the ARC CPD toolkit is helping harmonise nursing CPD programmes in the region. Additionally, after a presentation by the Tanzania Quad on their new Nursing and Midwifery Act, three countries (Lesotho, Malawi, and Seychelles) reported they were influenced to pursue efforts to modify their respective acts. This harmonisation and adoption of best practices is especially important in a region marked by high rates of nursing migration (Kingma, 2007).

The regional approach also facilitates the efficient engagement of national nursing leaders with the WHO, ICN, the ICM, and other normative bodies, helping to ensure nursing standards are adopted and reflected in country team projects. The annual Summative Congresses, with now 18 country teams participating, and twice yearly Learning Sessions comprising five to ten country teams, provide a critical and efficient platform for advancing research and science around nursing issues in the region, as evidenced by the large number of studies and publications that have resulted from ARC.

ARC is using its platform to advance greater harmonisation and standardisation in the region around a critical health service delivery area: NIMART. Over the next 2 years, ARC will be supporting consistent, standards-based approaches to ensure that NIMART is fully supported in scopes of practice, CPD programmes, licensure examinations, and pre-service accreditation requirements across the region. Other donors, such as PEPFAR's Nurse Educational Partnership Initiative, WHO, ICN, and ICM can leverage this platform to launch new guidance or tools, engage in dialogue with nursing leadership, and/or collect relevant information for informing programmes.

Lastly, ARC provides a novel approach to sustainable, country-driven programming. ARC puts nursing leaders at the center of decision-making and creates a structure for them to identify and address the most pressing nursing issues in their respective countries. ARC also brings national nursing organisations and leaders together (some of whom might have had adversarial professional relationships in the past), to empower them to act in a more united

front, not just on their ARC-supported projects, but in decision-making more broadly with other key stakeholders, such as ministries of health and other donors. The increasing overall average score of the ARC proposals suggests that nursing teams are growing in their capacity to effectively collaborate with one another and identify the most pressing nursing issues and to design effective and measurable approaches to resolving them. ARC also creates a forum for African leaders to learn from one another, ensuring that progress is driven by the region. Since its inception, the increased number of CPD proposals and newly revised scopes of practice are but two examples illustrating how country teams learn from each other and adapt successful approaches accordingly. However, sustaining this level of nurse-lead regulatory innovation beyond ARC's project period is an issue the initiative must confront. The challenge for ARC is how to make this vehicle for regional change sustainable through African-led organisations and financing.

# Conclusion

The ARC approach enhances nursing leadership within the ECSA region, promotes regional south-to-south sharing, and delivers a country-driven model of collaborative learning that advances nursing regulation and practice. The progress of country teams thus far suggests ARC is a successful model for regulation strengthening and capacity building, as well as a novel approach for sustainability and country ownership. The ARC platform has been a successful vehicle for regional harmonisation of updated regulations and promises to help facilitate the enhancement of HIV service delivery by nurses and midwives.

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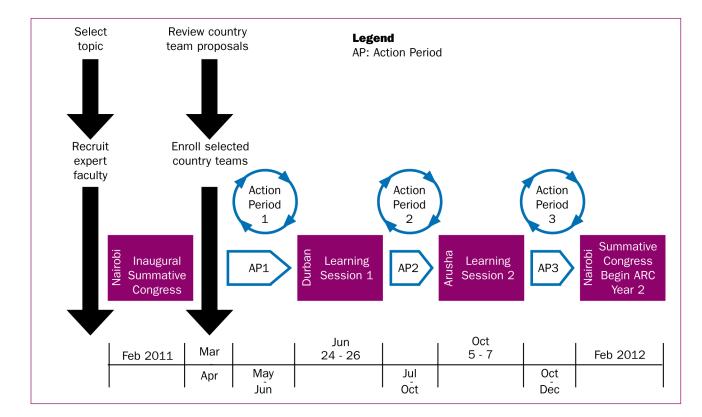
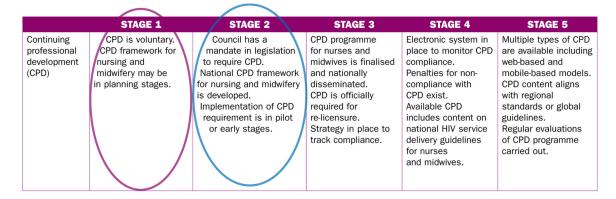


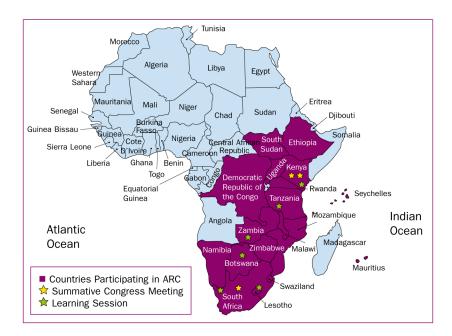
Figure 1.

ARC Year 1 Model for Collaborative Regulatory Improvement\*

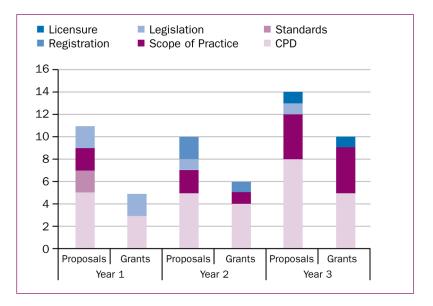
\*Based on the IHI Breakthrough Series model (IHI, 2003).



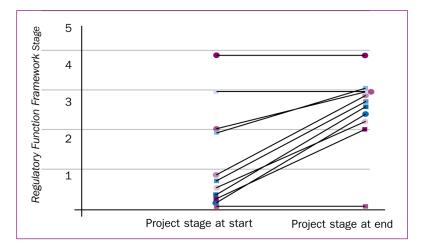
**Figure 2.** Example of advancement on Regulatory Function Framework: Beginning (purple circle) and ending (blue circle) stages on ARC CPD project



**Figure 3.**Countries participating in ARC (in green) and locations of Summative Congress meetings (in yellow) and Learning Sessions (in blue)



**Figure 4.** ARC proposal and grants, by year and topic



**Figure 5.** Starting and ending stages of completed ARC regulatory strengthening projects

Table 1

ARC year 3 (Nov 2013–Oct 2014) grants and stage on regulatory function framework at project start

Country	ARC-supported project	RFF Stage
Botswana	Conduct a gap analysis of HIV and AIDS content in pre-service and in-service training to inform their national CPD framework	Stage 2
Lesotho	Scale-up access to HIV related CPD by formalizing CPD requirements for licensure renewal	Stage 2
Namibia	Conduct a survey on CPD compliance among nurses delivering PMTCT of HIV services	Stage 3
Rwanda	Expand the scope of practice for nurses and midwives to ensure the inclusion of HIV services	Stage 3
Seychelles	Review and revise the scope of practice for nurses and midwives to include HIV and AIDS services	Stage 2
South Africa	Develop an accreditation system for CPD on HIV and AIDS content for nurses and midwives	Stage 1
South Sudan	Develop a scope of practice for nurses and midwives to include PMTCT and ART services	Stage 1
Swaziland	Establish a national entry to practice licensing examination to include content on HIV and AIDS	Stage 2
Uganda	Finalise the development of scopes of practice for nurses and midwives which include advanced HIV service delivery tasks	Stage 2
Zambia	Introduce CPD as a requirement for license renewal and initiate HIV related CPD for nurses and midwives	Stage 1

CPD—continuing professional development; PMTCT—prevention of mother-to-child transmission of HIV; ART—antiretroviral therapy; RFF—regulatory function framework